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8 FILES SEARCHED...

L2 41 L1

=> d l2 bib abs 1-41

L2 ANSWER 1 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:192621 CAPLUS

DN 116:192621

TI Antitumoric antibiotic NK155141 manufacture with Streptomyces

IN Nishigori, Takaaki; Kobayashi, Mutsuko; Ishii, Tadashi; Yokumoto, Hisao;  
**Harada, Takashi**; Saito, Seiichi; Shimada, Nobuyoshi

PA Nippon Kayaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03191788	A2	19910821	JP 1989-327430	19891219 <--
PRAI	JP 1989-327430		19891219		

GI For diagram(s), see printed CA Issue.

AB The antitumor antibiotic NK155141 (I) is manufactured by culturing Streptomyces sp. NK155141. I is also useful as an medical and agricultural fungicide and pesticide. The fungus was shake-cultured for 5 days at 27° in a medium containing **dextrin**, soybean meal, salts, etc. and mycelium collected by centrifugation. From 820 g wet mycelium, I 7.8 mg was recovered by extraction and chromatogs. The IR, UV, and NMR spectra of I were given. Also given was the acute toxicity of I 0.8 mg/kg mouse.

L2 ANSWER 2 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:129416 CAPLUS

DN 116:129416

TI FAB (fast atom bombardment) mass spectral analysis of methylated **β-cyclodextrins**

AU Horiyama, Shizuyo; Kamisako, Wasuke; Kubota, Yoko; Koizumi, Kyoko; Masuda, Katsuyoshi; **Harada, Kenichi**; Suzuki, Makoto

CS Fac. Pharm. Sci., Mukogawa Women's Univ., Nishinomiya, 663, Japan

SO Shitsuryo Bunseki (1991), 39(4), 183-91

CODEN: SHIBAK; ISSN: 0542-8645

DT Journal

LA Japanese

AB Methylation of **β-cyclodextrin** (β-CD, cyclomaltoheptaose) gave under basic conditions a complicated mixture containing

16 partially methylated products. The components were separated by repeated chromatog. Various matrixes were examined to obtain intense signals of their mol. ion species under FABMS conditions, and m-nitrobenzyl alc. was found to be the most suitable matrix. In order to determine the structures of

the three positional isomers of partially methylated  $\beta$ -CDs with the nominal mol. weight 1358 and abbreviated as 5D2T- $\beta$ -cd, the fragmentation based on the cleavage of the glycosidic bonds were carefully examined by B/E-constant linked scanning and tandem mass spectrometry.

L2 ANSWER 3 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1992:61364 CAPLUS  
 DN 116:61364  
 TI Rubber compositions with improved ozone resistance  
 IN Yamanaka, Keiji; Nagasawa, Tsuneo; **Harada, Makoto**  
 PA Kinugawa Rubber Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03227336	A2	19911008	JP 1990-20683	19900131 <--
PRAI	JP 1990-20683		19900131		

AB Title compns. comprise inclusion compds. of antioxidants and **cyclodextrin**. Addition of 3 phr inclusion compound of **cyclodextrin** and Antage 6 C [N-phenyl-N'-(1,3-dimethylbutyl)-p-phenylenediamine] to SBR or natural rubber improved the ozone resistance.

L2 ANSWER 4 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1992:23290 CAPLUS  
 DN 116:23290  
 TI Formation of  $\alpha$ - **cyclodextrin** clathrate compound and purification of  $\alpha$ - **cyclodextrin** therefrom  
 IN Kamaike, Kanji; **Harada, Akira**  
 PA Japan Organo Co., Ltd., Japan; Ensui Sugar Refining Co., Ltd.  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03237103	A2	19911023	JP 1990-32542	19900215 <--
	JP 2762398	B2	19980604		
PRAI	JP 1990-32542		19900215		

AB Title compound is formed simply by mixing a mixture of  $\alpha$ - **cyclodextrin** and other **cyclodextrins** with polyethylene glycol (PEG) in water, and removing excess PEG and other **cyclodextrins** from the precipitated insol. product. Removing of enclosed PEG from the above product by organic solvent extraction gives a cagelike pure  $\alpha$ - **cyclodextrin**. Only PEG is useful and selective enclosure for this purification

L2 ANSWER 5 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:491415 CAPLUS  
 DN 115:91415  
 TI Selective Ring-opening reaction of epoxides with sodium borohydride in the presence of **cyclodextrins** in aqueous media  
 AU Hu, Ying; Uno, Mitsunari; **Harada, Akira**; Takahashi, Shigetoshi  
 CS Inst. Sci. Ind. Res., Osaka Univ., Osaka, 567, Japan  
 SO Bulletin of the Chemical Society of Japan (1991), 64(6), 1884-8  
 CODEN: BCSJA8; ISSN: 0009-2673

DT Journal  
LA English  
OS CASREACT 115:91415  
AB In the presence of **cyclodextrins** (CDs), the ring-opening reaction of styrene oxide with NaBH<sub>4</sub> in aqueous media proceeded smoothly to give 1-phenylethanol with high selectivity of up to 94%, and kinetic resolution of the racemic epoxide was observed. Kinetic studies suggest that resolution based on the different reaction rates between two enantiomers included in the CD's activity. The reaction of epoxides such as 1,2-epoxyindan and 1,2-epoxy-3-phenylpropane are also affected by the addition of CDs to proceed smoothly with high regioselectivities.

L2 ANSWER 6 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1991:207441 CAPLUS  
DN 114:207441  
TI Reactions of organometallic complexes included in **cyclodextrins**: reactivity of alkylidicarbonyl( $\eta$ 5-cyclopentadienyl)iron complexes towards carbon monoxide and sulfur dioxide in the solid state  
AU Shimada, Masayuki; **Harada, Akira**; Takahashi, Shigetoshi  
CS Inst. Sci. Ind. Res., Osaka Univ., Ibaraki, 567, Japan  
SO Journal of the Chemical Society, Chemical Communications (1991), (4), 263-4  
CODEN: JCCCAT; ISSN: 0022-4936

DT Journal  
LA English  
AB Inclusion compds. of alkylidicarbonyl( $\eta$ 5-cyclopentadienyl)iron with **cyclodextrins** undergo, in the solid state, insertion of CO and SO<sub>2</sub> into the Fe-R bond; the effect of inclusion by **cyclodextrin** towards the insertion reactions strongly depends on the type of **cyclodextrins** used.

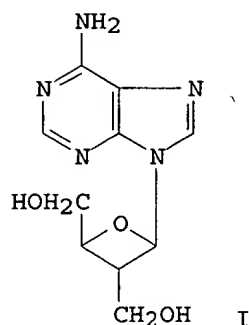
L2 ANSWER 7 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1986:496059 CAPLUS  
DN 105:96059  
TI Antibiotic NK84-0218 and pharmaceutical compositions containing it.  
IN Shimada, Nobuyoshi; Hasegawa, Shigeru; **Harada, Takashi**; Tomizawa, Takayuki; Fujii, Akio  
PA Nippon Kayaku Co., Ltd., Japan  
SO Eur. Pat. Appl., 30 pp.  
CODEN: EPXXDW

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 182315	A2	19860528	EP 1985-114555	19851116
	EP 182315	A3	19870304		
	EP 182315	B1	19890405		
	R: DE, FR, GB, IT				
	US 4743689	A	19880510	US 1985-796114	19851108
	JP 61293992	A2	19861224	JP 1985-257690	19851119 <--
	JP 03005398	B4	19910125		
	<u>US 4904585</u>	A	19900227	US 1987-115980	19871102
PRAI	JP 1984-243172	A	19841120		
	US 1985-796114	A3	19851108		

GI



AB Antibiotic NK84-0218 (I), having antibacterial, antiviral, and antineoplastic activities, is produced by cultivation of *Bacillus*. Thus, *B. megaterium* was shake-cultured in a pH 7.4 medium containing galactose, **dextrin**, Bacto-Soytone, corn steep liquor,  $(\text{NH}_4)_2\text{SO}_4$ , and  $\text{Ca}_2\text{CO}_3$  at 27° for 4 days. The culture broth was collected and I was isolated from the filtrate by adsorption/desorption with active C and ion exchange resins. The yield of I was .apprx.10.1 mg from 10L of filtrate. The anti-HeLa cell activity ( $\text{IC}_{50}$ ) of I is .apprx.47.0  $\mu\text{g/mL}$ . A tablet composition is described.

L2 ANSWER 8 OF 41 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:12668 CAPLUS

DN 100:12668

TI Inclusion compound of lankacidin-group antibiotic and its use

IN Harada, Setsuo; Okada, Junya

PA Takeda Chemical Industries, Ltd. , Japan

SO Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 91782	A2	19831019	EP 1983-301941	19830406
	EP 91782	A3	19840926		
	EP 91782	B1	19870722		
	R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
	JP 58177949	A2	19831018	JP 1982-61343	19820412 <--
	JP 03036827	B4	19910603		
	CA 1216581	A1	19870113	CA 1983-425214	19830405
	<u>US 4497803</u>	A	19850205	US 1983-482553	19830406
	ZA 8302471	A	19831228	ZA 1983-2471	19830408
	DK 8301588	A	19831013	DK 1983-1588	19830411
	ES 521362	A1	19840516	ES 1983-521362	19830411
PRAI	JP 1982-61343	A	19820412		
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Inclusion compds. prepared from lankacidin antibiotics such as I ( $\text{R}_1 = \text{O}$  or

H,OH; R<sub>2</sub>, R<sub>3</sub> = H or alkanoyl) and II (R<sub>4</sub> = H or alkanoyl) and **cyclodextrins** have enhanced water solubility and stability and are useful for the treatment of swine dysentery. Powdery lankacidin C was added to an aqueous solution of  $\beta$ - **cyclodextrin** and the absorbance of the filtered solution measured at 227-229 nm. The solubility of the antibiotic increased from 260  $\mu\text{g/mL}$  when no **cyclodextrin** was present to 3730  $\mu\text{g/mL}$  at 10-2 mol/L of  $\beta$ - **cyclodextrin**. A solution for injection was prepared containing 1.0 g lankacidin C, 3.7 g  $\beta$ - **cyclodextrin** and 100 mL saline solution. Lankacidin A- $\beta$ - **cyclodextrin** compound [88194-32-5] exhibited rapid bacterial effects when administered i.m. to pigs infected with swine dysentery. The spectral properties of the complexes are given.

L2 ANSWER 9 OF 41 USPATFULL on STN  
 AN 94:40060 USPATFULL  
 TI TAN-1251 compounds and their production from penicillium thomii  
 IN Shirafuji, Hideo, Nagaokakyo, Japan  
 Tsubotani, Shigetoshi, Kawanishi, Japan  
 Ishimaru, Takenori, Toyonaka, Japan  
 Harada, Setsuo, Kawanishi, Japan  
 PA Takeda Chemical Industries, Ltd., Osaka, Japan (non-U.S. corporation)  
 PI US 5310741 19940510  
 WO 9113887 19910919  
 AI US 1991-674342 19910422 (7)  
 WO 1991-JP295 19910305  
 19910422 PCT 371 date  
 19910422 PCT 102(e) date  
 PRAI JP 1990-55749 19900306  
 JP 1991-36107 19910301  
 JP 1991-37268 19910304  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Sevigny, Jeffrey J.  
 LREP Wenderoth, Lind & Ponack  
 CLMN Number of Claims: 12  
 ECL Exemplary Claim: 1  
 DRWN 6 Drawing Figure(s); 5 Drawing Page(s)  
 LN.CNT 1133

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound of the formula ##STR1## wherein R<sup>sup.1</sup> is hydrogen or a hydrocarbon residue which may be substituted; R<sup>sup.2</sup> is oxo or hydrogen plus hydroxy which may be acylated; R<sup>sup.3</sup> is hydrogen or hydroxy which may be acylated; at least one of the dotted lines represents a single bond, or a salt thereof, produced from Penicillium thomii has potent RA-89 muscarinic receptor blocking activity and is of value as therapeutic agent for parkinsonism, ulcer, etc. or as mydriatics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 41 USPATFULL on STN  
 AN 91:92547 USPATFULL  
 TI Benzophenone oxime ether compounds, pharmaceutical compositions and treatment methods  
 IN Yamagishi, Youji, Kamiinayoshi, Japan  
 Akasaka, Kozo, Ushiku, Japan  
 Suzuki, Takeshi, Ushiku, Japan  
 Miyamoto, Mitsuaki, Sakura, Japan

Nakamoto, Kouji, Tsuchiura, Japan  
 Okano, Kazuo, Yatabemachi, Japan  
 Abe, Shinya, Ushiku, Japan  
 Ikuta, Hironori, Ushiku, Japan  
 Hayashi, Kenji, Yatabemachi, Japan  
 Yoshimura, Hiroyuki, Yatabemachi, Japan  
 Fujimori, Tohru, Toyosato, Japan  
**Harada, Koukichi**, Yatabemachi, Japan  
 Yamatsu, Isao, Ushiku, Japan

PA Eisai Co., Ltd., Tokyo, Japan (non-U.S. corporation)

PI US 5064848 19911112 <--

AI US 1990-518816 19900504 (7)

RLI Division of Ser. No. US 1989-364712, filed on 9 Jun 1989, now patented,  
 Pat. No. US 4954523 which is a division of Ser. No. US 1987-24737, filed  
 on 11 Mar 1987, now patented, Pat. No. US 4886834

PRAI JP 1986-57061 19860317

JP 1986-65963 19860326

DT Utility

FS Granted

EXNAM Primary Examiner: Richter, Johann

LREP Flynn, Thiel, Boutell & Tanis

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 922

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new diphenyl-methane derivative is useful to inhibit agglomeration of  
 blood and is defined by the formula, including a diphenylethylene  
 derivative and a benzophenone oxime ether derivative. ##STR1## in which  
 R1 and R2 each are hydrogen, hydroxyl or a lower alkoxy, U is .dbd.CXY  
 or .dbd.N--O--W,

X is hydrogen, cyano or --COR6, R6 being hydroxyl or an amino, Y is  
 --R10--COOR3, R3 being hydrogen or a lower alkoxy, R10 being an alkylene  
 having 1 to 3 carbon atoms, straight or branched, --CO--NR4R5, R4 and R5  
 each being hydrogen, a lower alkyl or a lower arylalkyl,  
 --CH2--NHSO2--C6H5 or --C(R8).dbd.NR7, R7 being a lower alkoxy or an  
 aryl, R8 is --VR9, V being oxygen, sulfur or nitrogen, R9 being an alkyl  
 or an aryl,

W is --CH2--CO--CH2--COOR13, R13 being hydrogen or a lower alkyl,  
 --CH2--C(.dbd.NOR14)--CH2--COOR15, R15 being hydrogen or a lower alkyl,  
 R14 being a lower alkyl, --CH(CN)--(CH2)q--COOR16, R16 being hydrogen or  
 a lower alkyl, q being an integer of 1 to 3, or --(CH2)p--Z, Z being  
 --SH, --SCN or a monovalent group derived from a five- or six-membered  
 ring which may be substituted by a ring having one or more sulfur atoms  
 in the ring, p being 1 or 2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 41 USPATFULL on STN

AN 91:75548 USPATFULL

TI Glucomannan product and a method to coagulate it

IN **Harada, Seiki**, Zushi, Japan

Ito, Masatsugu, Tokyo, Japan

Iwanami, Koichi, Tokyo, Japan

Hashimoto, Kenichi, Tokyo, Japan

PA Uni Colloid Kabushiki Kaisha, Kanagawa, Japan (non-U.S. corporation)

Nippon Oil and Fats Company, Limited, Tokyo, Japan (non-U.S.)

corporation)  
 PI US 5049401 19910917 <--  
 AI US 1990-496204 19900319 (7)  
 PRAI JP 1989-63538 19890317  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Czaja, Donald E.; Assistant Examiner: Mowbray, John  
 LREP Wenderoth, Lind & Ponack  
 CLMN Number of Claims: 17  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 501

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a product containing glucomannan mixed with encapsulated acidic material having a wall made of hydrophobic substance which melts at a temperature higher than the coagulating temperature of the glucomannan. Because this acidic material is covered with a wall, when alkali is added to the mixture which is then heated, the glucomannan is coagulated. Then, the wall of the encapsulated material is melted by heating to liberate acid, neutralizing the alkaline substance, and producing a slightly alkaline, neutral or acidic glucomannan coagulated product. Further, although the glucomannan coagulated product has a water-releasing property, this can be reduced by adding other natural polysaccharides. Also, a decrease of elasticity caused by neutralization can be eliminated by adding food cellulose.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 41 USPATFULL on STN  
 AN 91:58961 USPATFULL  
 TI Diphenylethylene derivatives, pharmaceutical compositions containing same and treatment methods  
 IN Yamagishi, Youji, Kamiinayoshi, Japan  
 Akasaka, Kozo, Ushiku, Japan  
 Suzuki, Takeshi, Ushiku, Japan  
 Miyamoto, Mitsuaki, Sakura, Japan  
 Nakamoto, Kouji, Tsuchiura, Japan  
 Okano, Kazuo, Yatabemachi, Japan  
 Abe, Shinya, Ushiku, Japan  
 Ikuta, Hironori, Ushiku, Japan  
 Hayashi, Kenji, Yatabemachi, Japan  
 Yoshimura, Hiroyuki, Yatabemachi, Japan  
 Fujimori, Tohru, Toyosato, Japan  
 Harada, Koukichi, Yatabemachi, Japan  
 Yamatsu, Isao, Ushiku, Japan  
 PA Eisai Co., Ltd., Tokyo, Japan (non-U.S. corporation)  
 PI US 5034418 19910723 <--  
 AI US 1989-364711 19890609 (7)  
 RLI Division of Ser. No. US 1987-24737, filed on 11 Mar 1987, now patented, Pat. No. US 4886834  
 PRAI JP 1986-57061 19860317  
 JP 1986-65963 19860326  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Ivy, C. Warren; Assistant Examiner: Northington-Davis, Zinna  
 LREP Flynn, Thiel, Boutell & Tanis  
 CLMN Number of Claims: 9  
 ECL Exemplary Claim: 1



DRWN No Drawings

LN.CNT 926

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new diphenyl-methane derivative is useful to inhibit agglomeration of blood and is defined by the formula, including a diphenylethylene derivative and a benzophenone oxime ether derivative. ##STR1## in which R1 and R2 each are hydrogen, hydroxyl or a lower alkoxy, U is .dbd.CXY or .dbd.N--O--W,

X is hydrogen, cyano or --COR6, R6 being hydroxyl or an amino, Y is --R10--COOR3, R3 being hydrogen or a lower alkoxy, R10 being an alkylene having 1 to 3 carbon atoms, straight or branched, --CO--N4R5, R4 and R5 each being hydrogen, a lower alkyl or a lower arylalkyl, --CH2--NHSO2--C6H5 or --C(R8).dbd.NR7, R7 being a lower alkoxy or an aryl, R8 is --VR9, V being oxygen, sulfur or nitrogen, R9 being an alkyl or an aryl,

W is --CH2--CO--CH2--COOR13, R13 being hydrogen or a lower alkyl, --CH2--C(.dbd.NOR14)--CH2--COOR15, R15 being hydrogen or a lower alkyl, R14 being a lower alkyl, --CH(CN)--(CH2)q--COOR16, R16 being hydrogen or a lower alkyl, q being an integer of 1 to 3, or --(CH2)p--Z, Z being --SH, --SCN or a monovalent group derived from a five- or six-membered ring which may be substituted by a ring having one or more sulfur atoms in the ring, p being 1 or 2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 41 USPATFULL on STN

AN 91:44749 USPATFULL

TI Cerebral function ameliorating agents related to Tan-950 A

IN Harada, Setsuo, Kawanishi, Japan  
Nagaoka, Akinobu, Kawanishi, Japan

Itoh, Katsumi, Toyonaka, Japan

Terao, Shinji, Toyonaka, Japan

PA Takeda Chemical Industries, Ltd., Osaka, Japan (non-U.S. corporation)

PI US 5021439 19910604 &lt;--

AI US 1989-408389 19890918 (7)

PRAI JP 1988-276919 19881031

JP 1989-95595 19890414

JP 1989-222241 19890829

JP 1989-235123 19890911

DT Utility

FS Granted

EXNAM Primary Examiner: Shen, Cecelia

LREP Wegner, Cantor, Mueller &amp; Player

CLMN Number of Claims: 15

ECL Exemplary Claim: 1,15

DRWN 10 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 4517

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound having the formula (I) or (II) ##STR1## wherein R.sup.1 is a hydrogen atom or an organic residue bonded via a carbon atom, R.sup.2 is a hydrogen atom or a N-protecting group, --COR.sup.3 is an optionally esterified or amidated carboxyl group, R.sup.4 and R.sup.5 are the same or different and respectively a hydrogen atom or an acyl group or a chain or alicyclic hydrocarbon group optionally having an aryl substituent, R.sup.6 is NOH or O, n is an integer of 0 to 3, or R.sup.4 and R.sup.5 together with the adjacent nitrogen atom may form a ring or an optionally substituted benzylidene amino group, which is useful

therapeutics of brain dysfunction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 14 OF 41 USPATFULL on STN  
AN 91:24765 USPATFULL  
TI Antibiotic NK86-0279, process for production of the same and application  
of the same  
IN Nishikiori, Takaaki, Tokyo, Japan  
Yamazaki, Masanori, Tokyo, Japan  
Saito, Seiichi, Kashiwa, Japan  
Shimada, Nobuyoshi, Tokyo, Japan  
Kurokawa, Takashi, Ageo, Japan  
Hirose, Kiyonobu, Ageo, Japan  
Yamashita, Takumi, Tokyo, Japan  
Tsuchiya, Takako, Kyoto, Japan  
Harada, Takashi, Tokyo, Japan  
PA Nippon Kayaku Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)  
PI US 5003056 19910326 <--  
AI US 1988-288786 19881222 (7)  
PRAI JP 1987-325459 19871224  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Griffin, Ronald W.  
LREP Nields, Henry C.  
CLMN Number of Claims: 2  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 788

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to an antibiotic NK86-0279 of the formula:  
##STR1## which exhibits antifungal, antitumor, vascularizations-  
inhibitory and insecticidal activities.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 15 OF 41 USPATFULL on STN  
AN 91:15289 USPATFULL  
TI Novel antibiotic NK130119  
IN Nishikiori, Takaaki, Tokyo, Japan  
Yamazaki, Masanori, Tokyo, Japan  
Saito, Seiichi, Kashiwa, Japan  
Shimada, Nobuyoshi, Tokyo, Japan  
Kurokawa, Takashi, Ageo, Japan  
Hirose, Kiyonobu, Ageo, Japan  
Yamashita, Takumi, Tokyo, Japan  
Harada, Takashi, Tokyo, Japan  
PA Nippon Kayaku Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)  
PI US 4994582 19910219 <--  
AI US 1990-466589 19900117 (7)  
PRAI JP 1989-23697 19890203  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Raymond, Richard L.; Assistant Examiner: Owens, Amelia  
A.  
LREP Nields, Henry C.  
CLMN Number of Claims: 1  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 621

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to an antibiotic NK130119 of the formula:  
##STR1## which exhibits antifungal, antitumor, vascularizations-  
inhibitory and insecticidal activities.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 16 OF 41 JICST-EPlus COPYRIGHT 2004 JST on STN

AN 910915082 JICST-EPlus

TI Macromolecular Recognition by **Cyclodextrins** (II) Inclusion of  
Poly(ethyleneglycol) by A- **Cyclodextrin**.AU **HARADA AKIRA**; KAMACHI MIKIHARU; LI JCS ~~Osaka Univ., Faculty of Science~~SO ~~Kobunshi Gakkai Yokoshu (Polymer Preprints, Japan), (1991) vol. 40, no. 6,  
pp. 2038-2040. Journal Code: Z0703B (Fig. 6, Tbl. 1, Ref. 1)~~

CY Japan

DT Conference; Short Communication

LA Japanese

STA New

L2 ANSWER 17 OF 41 JICST-EPlus COPYRIGHT 2004 JST on STN

AN 910915081 JICST-EPlus

TI Macromolecular Recognition by **Cyclodextrins**. (I) Inclusion of  
Water-soluble Polymers by **Cyclodextrins**.AU **HARADA AKIRA**; KAMACHI MIKIHARU; LI JCS ~~Osaka Univ., Faculty of Science~~SO ~~Kobunshi Gakkai Yokoshu (Polymer Preprints, Japan), (1991) vol. 40, no. 6,  
pp. 2035-2037. Journal Code: Z0703B (Fig. 1, Tbl. 5, Ref. 2)~~

CY Japan

DT Conference; Short Communication

LA Japanese

STA New

L2 ANSWER 18 OF 41 JICST-EPlus COPYRIGHT 2004 JST on STN

AN 910762478 JICST-EPlus

TI FAB Mass Spectral Analysis of Methylated B- **Cyclodextrins**.AU HORIYAMA SHIZUYO; KAMISAKO WASUKE; KUBOTA YOKO; KOIZUMI KYOKO  
MASUDA KATSUYOSHI; **HARADA KEN'ICHI**; SUZUKI MAKOTO

CS Mukogawa Women's Univ., Faculty of Pharmaceutical Sciences

Meijo Univ., Faculty of Pharmaceutical Science

SO Shitsuryo Bunseki (Journal of the Mass Spectrometry Society of Japan),  
(1991) vol. 39, no. 4, pp. 183-191. Journal Code: G0046A (Fig. 6, Tbl. 4,  
Ref. 16)

CODEN: JMSJEY; ISSN: 1340-8097

CY Japan

DT Journal; Article

LA Japanese

STA New

AB Methylation of B- **cyclodextrin** (B-CD,  
cyclomaltoheptaose) gave under basic conditions a complicated mixture  
containing 16 partially methylated products. Thus the components were  
separated by repeated chromatography. Various matrices were examined to  
obtain intense signals of their molecular ion species under FABMS  
conditions, and m-nitrobenzylalcohol was found to be the most suitable  
matrix. In order to determine the structures of the three positional  
isomers of partially methylated B-CDs (1, 2 and 3) with the nominal  
molecular weight 1358 and abbreviated as 5D2T-B-CD, the fragmentation  
based on the cleavage of the glycosidic bonds were carefully examined by

B/E-constant linked scanning and tandem mass spectrometry. (author abst.)

L2 ANSWER 19 OF 41 JICST-EPlus COPYRIGHT 2004 JST on STN  
AN 910696100 JICST-EPlus  
TI The Complex Formation Between A- **Cyclodextrin** and  
Poly(ethylene glycol) and Its Stoichiometric Discussion.  
AU LI J; **HARADA AKIRA**; KAMACHI MIKIHARU  
CS ~~Osaka Univ., Faculty of Science~~  
SO ~~Kobunshi Gakkai Yokoshu (Polymer Preprints, Japan), (1991) vol. 40, no. 3,~~  
~~pp. 893. Journal Code: Z0703B (Fig. 2, Ref. 1)~~  
CY Japan  
DT Conference; Short Communication  
LA Japanese  
STA New

L2 ANSWER 20 OF 41 JICST-EPlus COPYRIGHT 2004 JST on STN  
AN 910557516 JICST-EPlus  
TI Selective Ring-Opening Reaction of Epoxides with Sodium Borohydride in the  
Presence of **Cyclodextrins** in Aqueous Media.  
AU HU Y; UNO M; **HARADA A**; TAKAHASHI S  
CS Osaka Univ., Osaka  
SO Bull Chem Soc Jpn, (1991) vol. 64, no. 6, pp. 1884-1888. Journal Code:  
G0450A (Fig. 1, Tbl. 4, Ref. 17)  
CODEN: BCSJA8; ISSN: 0009-2673  
CY Japan  
DT Journal; Article  
LA English  
STA New

AB In the presence of **cyclodextrins** (CDs), the ring-opening reaction  
of styrene oxide with NaBH<sub>4</sub> in aqueous media proceeded smoothly to give  
1-phenylethanol with high selectivity of up to 94%, and kinetic resolution  
of the racemic epoxide was observed. Kinetic studies suggest the  
resolution based on the different reaction rates between two enantiomers  
included in the CD's cavity. The reaction of epoxides such as  
1,2-epoxyindan and 1,2-epoxy-3-phenylpropane are also affected by the  
addition of CDs to proceed smoothly with high regioselectivities. (author  
abst.)

L2 ANSWER 21 OF 41 JICST-EPlus COPYRIGHT 2004 JST on STN  
AN 910309665 JICST-EPlus  
TI X-ray structure analysis of **cyclodextrin** supramolecular  
compounds.  
AU **HARADA KAZUAKI**  
CS ~~Res. Inst. for Polymers and Textiles~~  
SO ~~Kagaku Kogyo (Chemical Industry), (1991) vol. 42, no. 4, pp. 294-300.~~  
~~Journal Code: F0101A (Fig. 9, Tbl. 2, Ref. 33),~~  
CODEN: KAKOAY; ISSN: 0451-2014  
CY Japan  
DT Journal; Commentary  
LA Japanese  
STA New

L2 ANSWER 22 OF 41 BABS COPYRIGHT 2004 BEILSTEIN MDL on STN  
AN 5582269 BABS  
TI Selective Ring-Opening Reaction of Epoxides with Sodium Borohydride in the  
Presence of **Cyclodextrins** in Aqueous Media  
AU Hu, Ying; Uno, Mitsunari; **Harada, Akira**; Takahashi, Shigetoshi  
SO Bull.Chem.Soc.Jpn. (1991), 64(6), 1884-1888  
CODEN: BCSJA8

DT Journal  
LA English  
SL English  
AN 5582269 BABS  
AB In the presence of **cyclodextrins** (CDs), the ring-opening reaction of styrene oxide with NaBH<sub>4</sub> in aqueous media proceeded smoothly to give 1-phenylethanol with high selectivity of up to 94percent, and kinetic resolution of the racemic epoxide was observed. Kinetic studies suggest the resolution based on the different reaction rates between two enantiomers included in the CD's cavity. The reaction of epoxides such as 1,2-epoxyindan and 1,2-epoxy-3-phenylpropane are also affected by the addition of CDs to proceed smoothly with high regioselectivities.

L2 ANSWER 23 OF 41 BABS COPYRIGHT 2004 BEILSTEIN MDL on STN  
AN 5528186 BABS  
TI Reactions of Organometallic Complexes included in **Cyclodextrins**: Reactivity of Alkyldicarbonyl( $\eta^5$ -cyclopentadienyl)iron Complexes towards Carbon Monoxide and Sulphur Dioxide in the Solid State  
AU Shimada, Masayuki; **Harada, Akira**; Takahashi, Shigetoshi  
SO J.Chem.Soc.Chem.Comm. (1991), (4), 263-264  
CODEN: JCCCAT  
DT Journal  
LA English  
SL English  
AN 5528186 BABS  
AB Inclusion compounds of alkyldicarbonyl( $\eta^5$ -cyclopentadienyl)iron with **cyclodextrins** undergo, in the solid state, insertion of carbon monoxide and sulphur dioxide into the Fe-R bond; the effect of inclusion by **cyclodextrin** towards the insertion reactions strongly depends on the type of **cyclodextrins** used.

L2 ANSWER 24 OF 41 JAPIO (C) 2004 JPO on STN  
AN 1991-237103 JAPIO  
TI INCLUSION COMPOUND OF ALPHA-CYCLODETRIN AND SEPARATION AND PURIFICATION OF ALPHA-CYCLODEXTRIN  
IN KAMAIKE KANJI; **HARADA AKIRA**  
PA JAPAN ORGANO CO LTD  
ENSUIKO SUGAR REFINING CO LTD  
PI JP 03237103 A 19911023 Heisei  
AI JP 1990-32542 (JP02032542 Heisei) 19900215  
PRAI JP 1990-32542 19900215  
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1991  
AN 1991-237103 JAPIO  
AB PURPOSE: To provide the subject inclusion compound composed of  $\alpha$ -**cyclodextrin** molecule constituting an inclusion lattice and a polyethylene glycol molecule included therein and useful for separation and purification of high-purity  $\alpha$ -**cyclodextrin** suitable, e.g. for supporting and stabilizing medicines.  
CONSTITUTION: A mixture of various **cyclodextrins** containing  $\alpha$ -**cyclodextrin** is mixed with a polyethylene glycol having 400-50000 molecular weight in the presence of water to produce an insoluble  $\alpha$ -**cyclodextrin** inclusion compound composed of  $\alpha$ -**cyclodextrin** molecule constituting an inclusion lattice and a polyethylene glycol molecule included therein. An organic solvent is then added to the resultant  $\alpha$ -**cyclodextrin** inclusion compound to remove the polyethylene glycol from the  $\alpha$ -&Rgr;. COPYRIGHT: (C)1991,JPO&Japio

L2 ANSWER 25 OF 41 JAPIO (C) 2004 JPO on STN

AN 1991-227336 JAPIO  
TI RUBBER COMPOSITION  
IN YAMANAKA KEIJI; NAGASAWA TSUNEO; **HARADA MAKOTO**  
PA KINUGAWA RUBBER IND CO LTD  
PI JP 03227336 A 19911008 Heisei  
AI JP 1990-20683 (JP02020683 Heisei) 19900131  
PRAI JP 1990-20683 19900131  
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1991  
AN 1991-227336 JAPIO  
AB PURPOSE: To obtain a rubber composition, containing an antioxidant included in **cyclodextrin** and having high ozone and flex cracking resistance.  
CONSTITUTION: The objective composition containing an antioxidant [e.g. N-phenyl-N'-(1,3-dimethylbutyl)-p-phenylenediamine] included in **cyclodextrin** (all of the  $\alpha$ -,  $\beta$ - and  $\gamma$ -**cyclodextrins**).  
COPYRIGHT: (C)1991,JPO&Japio

L2 ANSWER 26 OF 41 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED.  
on STN  
AN 1993-0133620 PASCAL  
TIEN Reactions of organometallic complexes included in **cyclodextrins**: reactivity of alkylidicarbonyl( $\eta$ .sup.5-cyclopentadienyl)iron complexes towards carbon monoxide and sulphur dioxide in the solid state  
AU SHIMADA M.; **HARADA A.**; TAKAHASHI S.  
CS Osaka univ., inst. sci. industrial res., Ibaraki, Osaka 567, Japan  
SO Journal of the chemical society. Chemical communications, (1991) (4), 263-264, 5 refs.  
ISSN: 0022-4936 CODEN: JCCCAT  
DT Journal  
BL Analytic  
CY United Kingdom  
LA English  
AV INIST-11990, 354000017860460330

L2 ANSWER 27 OF 41 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED.  
on STN  
AN 1992-0009744 PASCAL  
TIEN Selective ring-opening reaction of epoxides with sodium borohydride in the presence of **cyclodextrins** in aqueous media  
AU HU Y.; UNO M.; **HARADA A.**; TAKAHASHI S.  
CS Osaka univ., inst. sci. undustrial res., Ibaraki Osaka 567, Japan  
SO Bulletin of the Chemical Society of Japan, (1991), 64(6), 1884-1888, 17 refs.  
ISSN: 0009-2673 CODEN: BCSJA8  
DT Journal  
BL Analytic  
CY Japan  
LA English  
AV INIST-104, 354000010433310260

L2 ANSWER 28 OF 41 PATDPAFULL COPYRIGHT 2004 DPMA on STN  
AN DE69130643 PATDPAFULL ED 20021010 EW 199918  
TI TAN-1251-VERBINDUNG, IHRE DERIVATE, HERSTELLUNG UND VERWENDUNG  
IN SHIRAFUJI, Hideo, Nagaokakyo-shi, Kyoto 617, JP;  
TSUBOTANI, Shigetoshi, Kawanishi-shi, Hyogo 666-01, JP;  
ISHIMARU, Takenori, Toyonaka-shi, Osaka 560, JP;  
**HARADA, Setsuo, Kawanishi-shi, Hyogo 666-01, JP**

PA Takeda Chemical Industries, Ltd., Osaka, JP  
AG Lederer, Keller & Riederer, 80538 Muenchen  
DT Patent  
LA German  
LAF English  
PIT DET2 DE-Publikation der uebersetzten EP-Patentschrift  
EPA EP-Publikation der EP-Patentanmeldung  
EPB EP-Publikation der EP-Patentschrift  
WOA WO-Publikation der PCT-Patentanmeldung

PI DE 69130643 T2 19990506  
EP 532752 A 19930324  
EP 532752 B 19981216  
WO 9113887 A 19910919

AI DE 1991-69130643 E 19910305  
EP 1991-904808 AW 19910305  
WO 1991-JP295 A 19910305

PRAI JP 1990- 55749/90 19900306  
JP 1991- 36107/91 19910301  
JP 1991- 37268/91 19910304

L2 ANSWER 29 OF 41 PATDPAFULL COPYRIGHT 2004 DPMA on STN

AN DE69027180 PATDPAFULL ED 20021009 EW 199702  
TI 4-Acylaminopyridin-Derivate  
IN Ninomiya, Kunihiro, Deceased, JP;  
Saito, Kenichi, Belmont, MA 02178, US;  
Sugano, Mamoru, Mitsubishi Kasei K. K., Kashima-gun, Ibaraki-ken, JP;  
Tobe, Akihiro, Yokohama-shi, Kanagawa-ken, JP;  
Morinaka, Yasuhiro, Tsuchiura-shi, Ibaraki-ken, JP;  
Bessho, Tomoko, Machida-shi, Tokyo, JP;  
Harada, Haruko, Yokohama-shi, Kanagawa-ken, JP

PA Mitsubishi Chemical Corp., Tokio/Tokyo, JP  
AG Strehl, Schuebel-Hopf, Groening & Partner, 80538 Muenchen  
DT Patent  
LA German  
LAF English  
PIT DET2 DE-Publikation der uebersetzten EP-Patentschrift  
EPA EP-Publikation der EP-Patentanmeldung  
EPB EP-Publikation der EP-Patentschrift

PI DE 69027180 T2 19970109  
EP 427636 A 19910515  
EP 427636 B 19960529

AI DE 1990-69027180 E 19901108  
EP 1990-403182 A 19901108

PRAI JP 1989- 290915/89 19891108  
JP 1989- 290916/89 19891108  
JP 1989- 290918/89 19891108

L2 ANSWER 30 OF 41 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.  
on STN

AN 91:364051 SCISEARCH  
GA The Genuine Article (R) Number: FT205  
TI SELECTIVE RING-OPENING REACTION OF EPOXIDES WITH SODIUM-BOROHYDRIDE IN THE  
PRESENCE OF CYCLODEXTRINS IN AQUEOUS-MEDIA  
AU HU Y; UNO M; HARADA A; TAKAHASHI S (Reprint)  
CS OSAKA UNIV, INST SCI & IND RES, IBARAKI, OSAKA 567, JAPAN  
CYA JAPAN  
SO BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN, (1991) Vol. 64, No.  
6, pp. 1884-1888.

DT Article; Journal

FS PHYS

LA ENGLISH

REC Reference Count: 19

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB In the presence of **cyclodextrins** (CDs), the ring-opening reaction of styrene oxide with NaBH<sub>4</sub> in aqueous media proceeded smoothly to give 1-phenylethanol with high selectivity of up to 94%, and kinetic resolution of the racemic epoxide was observed. Kinetic studies suggest the resolution based on the different reaction rates between two enantiomers included in the CD's cavity. The reaction of epoxides such as 1,2-epoxyindan and 1,2-epoxy-3-phenylpropane are also affected by the addition of CDs to proceed smoothly with high regioselectivities.

L2 ANSWER 31 OF 41 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.  
on STN

AN 91:135598 SCISEARCH

GA The Genuine Article (R) Number: FA238

TI REACTIONS OF ORGANOMETALLIC COMPLEXES INCLUDED IN **CYCLODEXTRINS**  
- REACTIVITY OF ALKYLDICARBONYL(ETA-5-CYCLOPENTADIENYL) IRON COMPLEXES  
TOWARDS CARBON-MONOXIDE AND SULFUR-DIOXIDE IN THE SOLID-STATE

AU SHIMADA M; **HARADA A**; TAKAHASHI S (Reprint)

CS OSAKA UNIV, INST SCI & IND RES, IBARAKI, OSAKA 567, JAPAN

CYA JAPAN

SO JOURNAL OF THE CHEMICAL SOCIETY-CHEMICAL COMMUNICATIONS, (1991)  
No. 4, pp. 263-264.

DT Article; Journal

FS PHYS

LA ENGLISH

REC Reference Count: 14

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Inclusion compounds of alkyldicarbonyl(eta-5-cyclopentadienyl)iron with **cyclodextrins** undergo, in the solid state, insertion of carbon monoxide and sulphur dioxide into the Fe-R bond; the effect of inclusion by **cyclodextrin** towards the insertion reactions strongly depends on the type of **cyclodextrins** used.

L2 ANSWER 32 OF 41 APOLLIT COPYRIGHT 2004 FIZ KA on STN

AN 1991:14690 APOLLIT

TI Selective ring-opening reaction of epoxides with sodium borohydride in the presence of **cyclodextrins** in aqueous media  
Selektive Ringoeffnung von Epoxiden mit Borhydrid in waessrigem Medium und in der Gegenwart von **Cyclodextrinen**

AU Hu, Y.; Uno, M.; **Harada, A.**; Takahashi, S.

SO Bull. Chem. Soc. Jpn. (1991) 64(6), p.1884-1888, 5p,1f,4t,17l  
CODEN: BCSJAB ISSN: 0009-2673

DT Journal

LA English

AB Die Oeffnung des Styroloxidringes mit NaBH<sub>4</sub> in waessrigem Medium liefert in Gegenwart von **Cyclodextrin** mit 94 %iger Ausbeute 1-Phenylethanol und es wird eine kinetische Trennung des Epoxyrazemates beobachtet. Die Autoren diskutieren die Ursachen des regiospezifischen Reaktionsablaufes ebenso wie die Ergebnisse der gleichfalls regiospezifischen ablaufenden Reaktionen mit 1,2-Epoxyindan und 1,2-Epoxy-3-phenylpropan.

L2 ANSWER 33 OF 41 CASREACT COPYRIGHT 2004 ACS on STN

AN 115:91415 CASREACT



TI Selective Ring-opening reaction of epoxides with sodium borohydride in the presence of **cyclodextrins** in aqueous media  
AU Hu, Ying; Uno, Mitsunari; **Harada, Akira**; Takahashi, Shigetoshi  
CS Inst. Sci. Ind. Res., Osaka Univ., Osaka, 567, Japan  
SO Bulletin of the Chemical Society of Japan (1991), 64(6), 1884-8  
CODEN: BCSJA8; ISSN: 0009-2673  
DT Journal  
LA English  
AB In the presence of **cyclodextrins** (CDs), the ring-opening reaction of styrene oxide with NaBH<sub>4</sub> in aqueous media proceeded smoothly to give 1-phenylethanol with high selectivity of up to 94%, and kinetic resolution of the racemic epoxide was observed. Kinetic studies suggest that resolution based on the different reaction rates between two enantiomers included in the CD's activity. The reaction of epoxides such as 1,2-epoxyindan and 1,2-epoxy-3-phenylpropane are also affected by the addition of CDs to proceed smoothly with high regioselectivities.

L2 ANSWER 34 OF 41 CHEMINFORMRX COPYRIGHT 2004 FIZ CHEMIE on STN  
AN 199136097 CHEMINFORMRX  
TI Selective Ring-Opening Reaction of Epoxides with Sodium Borohydride in the Presence of **Cyclodextrins** in Aqueous Media.  
AU HU, Y.; UNO, M.; **HARADA, A.**; TAKAHASHI, S.  
CS Inst. Sci. Ind. Res., Osaka Univ., Ibaraki, Osaka 567, Japan  
SO Bull. Chem. Soc. Jpn., 64(6), 1884-1888 (1991)  
CODEN: BCSJA8 ISSN: 0009-2673  
LA English  
AN 199136097 CHEMINFORMRX  
AB Ring-opening reactions of styrene oxide (I) with NaBH<sub>4</sub> in the presence of  $\beta$ - **cyclodextrin** gives rise to the products (II) and (III). . .  $\gamma$ -**Cyclodextrin** is less efficient. As it can be seen from the scheme, kinetic resolution of the racemic epoxide is observed. The resolution process is discussed on the basis of results from kinetic studies. Similarly, the addition of **cyclodextrins** in the ring-opening reactions of epoxides such as (IV) and (V) produces high regioselectivities.

L2 ANSWER 35 OF 41 DPCI COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 1983-796724 [43] DPCI  
DNC C1983-102781  
TI Inclusion cpd. of lankacidin gp. antibiotic and **cyclodextrin** - with improved water solubility and stability and enhanced bio availability.  
DC A96 B04 C03 D16  
IN **HARADA, S**; OKADA, J  
PA (TAKE) TAKEDA CHEM IND LTD  
CYC 15  
PI EP 91782 A 19831019 (198343)\* EN 26  
R: BE CH DE FR GB IT LI NL SE  
DK 8301588 A 19831205 (198404)  
ZA 8302471 A 19831110 (198409)  
JP 58177949 A 19831018 (198415)  
ES 8405032 A 19840901 (198447)  
US 4497803 A 19850205 (198508)  
CA 1216581 A 19870113 (198707)  
EP 91782 B 19870722 (198729) EN  
R: BE CH DE FR GB IT LI NL SE  
DE 3372577 G 19870827 (198735)  
JP 03036827 B 19910603 (199126) <--  
ADT EP 91782 A EP 1983-301941 19830406; ZA 8302471 A ZA 1983-2471 19830408; JP

58177949 A JP 1982-61345 19820412; US 4497803 A US 1983-482553 19830406;  
JP 03036827 B JP 1982-61343 19820412

PRAI JP 1982-61343 19820412

L2 ANSWER 36 OF 41 ENERGY COPYRIGHT 2004 USDOE/IEA-ETDE on STN

AN 1992(8):50231 ENERGY

TI FAB mass spectral analysis of methylated beta-cyclodextrins.

FABMS ni yoru mechiruka beta-cyclodextrin rui no bunseki.

AU Horiyama, S.; Kamisako, W.; Kubota, Y.; Koizumi, K. (Mukogawa Women's University, Hyogo (Japan)); Masuda, K.; Harada, K.; Suzuki, M. (Meijo University, Nagoya (Japan). Faculty of Pharmacy)

SO Shitsuryo Bunseki (Mass Spectroscopy) (Japan) (28 Aug 1991) v. 39(4) p. 183-191.

CODEN: SHIBAK ISSN: 0542-8645

DT Journal

CY Japan

LA Japanese

FA AB

AB BETA-cyclodextrin beta-CD has the excellent inclusion property and a derivative, dimethyl-beta-CD which has the improved solubility is especially paid attention to but it becomes important to establish the separating and identifying method for many byproducts. This paper carried out measurements with FABMS (fast atom bombardment mass spectrometry) by using various matrices to get spectra giving the information necessary for the determination of molecular weight and the estimation of position isomer of the partially methylated beta-CD, and observed the generation of molecular ions. As a result, the molecular weight of partially methylated beta-CD was measured by selecting m-nitrobenzyl alcohol by which (M+H)+, (M+Na)+ and fragment ions were confirmed sensitively. In addition, much knowledge could be obtained concerning the position isomer and fragmentation by selecting the (M+H)+ as the precursor ion and by performing the B/E constant linked scanning and tandem mass spectrometry. 16 refs., 6 figs., 4 tabs.

L2 ANSWER 37 OF 41 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02182224 IFIPAT; IFIUDB; IFICDB

TI GLUCOMANNAN PRODUCT AND A METHOD TO COAGULATE IT; NEUTRALIZATION OF ALKALI WITH ACID, FOODS

INF Harada, Seiki, Zushi, JP

Hashimoto, Kenichi, Tokyo, JP

Ito, Masatsugu, Tokyo, JP

Iwanami, Koichi, Tokyo, JP

IN Harada Seiki (JP); Hashimoto Kenichi (JP); Ito Masatsugu (JP);

Iwanami Koichi (JP)

PAF Nippon Oil and Fats Company, Limited, Tokyo, JP

Uni Colloid Kabushiki Kaisha, Kanagawa, JP

PA NOF Corp JP

Uni Colloid K K JP

(21157, 59912)

EXNAM Czaja, Donald E

EXNAM Mowbray, John

AG Wenderoth, Lind & Ponack

PI US 5049401 A 19910917 (CITED IN 006 LATER PATENTS)

AI US 1990-496204 19900319

XPD 19 Mar 2010

PRAI JP 1989-63538 19890317

FI US 5049401 19910917

DT Utility; REASSIGNED

FS CHEMICAL

GRANTED  
MRN 005255 MFN: 0534  
007401 0509  
011506 0335  
CLMN 17  
AB The present invention provides a product containing glucomannan mixed with encapsulated acidic material having a wall made of hydrophobic substance which melts at a temperature higher than the coagulating temperature of the glucomannan. Because this acidic material is covered with a wall, when alkali is added to the mixture which is then heated, the glucomannan is coagulated. Then, the wall of the encapsulated material is melted by heating to liberate acid, neutralizing the alkaline substance, and producing a slightly alkaline, neutral or acidic glucomannan coagulated product. Further, although the glucomannan coagulated product has a water-releasing property, this can be reduced by adding other natural polysaccharides. Also, a decrease of elasticity caused by neutralization can be eliminated by adding food cellulose.  
CLMN 17  
L2 ANSWER 38 OF 41 INPADOC COPYRIGHT 2004 EPO on STN  
LEVEL 2  
AN 64999173 INPADOC EW 199826 UW 199831  
IN KAMAIKE KANJI; HARADA AKIRA  
INS KAMAIKE KANJI; **HARADA AKIRA**  
PA ORUGANO KK; ENSUIKO SEITO KK  
PAS ORGANO KK; ENSUIKO SUGAR REFINING  
DT Patent  
PIT JPB2 PUBLISHED REGISTERED PATENT SPECIFICATION  
PI JP 2762398B B2 19980604  
AI JP 1990-32542 A 19900215  
PRAI JP 1990-32542 A 19900215  
L2 ANSWER 39 OF 41 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 1991013887 PCTFULL ED 20020513  
TIEN COMPOUND TAN-1251, ITS DERIVATIVES, THEIR PRODUCTION AND USE  
TIFR COMPOSE TAN-1251, SES DERIVES, LEUR PRODUCTION ET LEUR UTILISATION  
IN SHIRAFUJI, Hideo;  
TSUBOTANI, Shigetoshi;  
ISHIMARU, Takenori;  
**HARADA, Setsuo**  
PA TAKEDA CHEMICAL INDUSTRIES, LTD.;  
SHIRAFUJI, Hideo;  
TSUBOTANI, Shigetoshi;  
ISHIMARU, Takenori;  
HARADA, Setsuo  
LA English  
DT Patent  
PI **WO 9113887** **A1 19910919**  
DS W: AT BE CA CH DE DK ES FR GB GR IT JP LU NL SE US  
AI WO 1991-JP295 A 19910305  
PRAI JP 1990-2/55749 19900306  
JP 1991-3/36107 19910301  
JP 1991-3/37268 19910304  
ABEN A compound of formula (I), wherein R1 is hydrogen or a hydrocarbon residue which may be substituted; R2 is oxo or hydrogen plus hydroxy which may be acylated; R3 is a hydrogen or hydroxy which may be acylated; at least one of the dotted lines represents a

single bond, or a salt thereof,  
has potent muscarinic receptor blocking activity and is of value as  
therapeutic agent for  
parkinsonism, ulcer, etc. or as mydriatics.

ABFR Un compose a la formule (I), dans laquelle R1 est un hydrogene ou un  
residu hydrocarbure  
eventuellement substitue, R2 est oxo ou hydrogene ainsi que de  
l'hydroxyle eventuellement acyle; R3  
est un hydrogene ou un hydroxyle eventuellement acyle; au moins une des  
lignes en pointille  
represente une liaison simple. Ce compose ou un de ses sels a un  
puissant effet de blocage du  
recepteur muscarinique et est utile comme agent de traitement de la  
maladie de Parkinson, d'ulceres,  
etc. ou comme mydriatique.

L2 ANSWER 40 OF 41 TOXCENTER COPYRIGHT 2004 ACS on STN

AN 1992:135446 TOXCENTER

CP Copyright 2004 ACS

DN CA11619192621M

TI Antitumor antibiotic NK155141 manufacture with Streptomyces

AU Nishigori, Takaaki; Kobayashi, Mutsuko; Ishii, Tadashi; Yokumoto, Hisao;  
**Harada, Takashi**; Saito, Seiichi; Shimada, Nobuyoshi

CS ASSIGNEE: Nippon Kayaku Co., Ltd.

PI JP 91191788 A2 21 Aug 1991

SO (1991) Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF.

CY JAPAN

DT Patent

FS CAPLUS

OS CAPLUS 1992:192621

LA Japanese

ED Entered STN: 20011116

Last Updated on STN: 20021008

AB The antitumor antibiotic NK155141 (I) is manufactured by culturing Streptomyces  
sp. NK155141. I is also useful as an medical and agricultural fungicide  
and pesticide. The fungus was shake-cultured for 5 days at 27° in  
a medium containing **dextrin**, soybean meal, salts, etc. and mycelium  
collected by centrifugation. From 820 g wet mycelium, I 7.8 mg was  
recovered by extraction and chromatogs. The IR, UV, and NMR spectra of I were  
given. Also given was the acute toxicity of I 0.8 mg/kg mouse.

L2 ANSWER 41 OF 41 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1983-796724 [43] WPIDS

DNC C1983-102781

TI Inclusion cpd. of lankacidin gp. antibiotic and **cyclodextrin** -  
with improved water solubility and stability and enhanced bio  
availability.

DC A96 B04 C03 D16

IN **HARADA, S**; OKADA, J

PA (TAKE) TAKEDA CHEM IND LTD

CYC 15

PI EP 91782 A 19831019 (198343)\* EN 26

R: BE CH DE FR GB IT LI NL SE

DK 8301588 A 19831205 (198404)

ZA 8302471 A 19831110 (198409)

JP 58177949 A 19831018 (198415)

ES 8405032 A 19840901 (198447)

US 4497803 A 19850205 (198508)

CA 1216581 A 19870113 (198707)  
 EP 91782 B 19870722 (198729) EN  
 R: BE CH DE FR GB IT LI NL SE  
 DE 3372577 G 19870827 (198735)  
 JP 03036827 B 19910603 (199126) <--

ADT EP 91782 A EP 1983-301941 19830406; ZA 8302471 A ZA 1983-2471 19830408; JP  
 58177949 A JP 1982-61345 19820412; US 4497803 A US 1983-482553 19830406;  
 JP 03036827 B JP 1982-61343 19820412

PRAI JP 1982-61343 19820412

AN 1983-796724 [43] WPIDS

AB EP 91782 A UPAB: 19930925

Inclusion cpds. (I) of lankacidin gp. antibiotics (II) with **cyclodextrin** are new. Pref. (II) are lankacidins A, C or C-8-ester, lankacidinol A, lankacidinol, lankacyclinol and lankacyclinol A. The **cyclodextrin** may be alpha, beta, gamma or delta.

Pref. esters of (II) are lankacidin C-8-acetate or propionate, the C-14-propionate and the C-8,14-diacetate. Preparation is by adding (II) to a solution of **cyclodextrin** in pref. water or distilled water for injection, stirring, pref. for 30 min. -24 hrs., and filtering if necessary. Concentration of **cyclodextrin** is 0.1-100 mM. The solution may then be freeze dried.

(I) are highly soluble in water with high stability, c.f. the parent, and have improved bioavailability. (II) are useful as antibacterials, antitumour agents and for treatment of swine dysentery. (I) are pref. admin. at 0.2-1.0g per day for treatment of swine dysentery.  
 0/6

ABEQ EP 91782 B UPAB: 19930925

An inclusion compound of **cyclodextrin** with a lankacidin-group antibiotic of formula (I) or (II): where R' is =O or CHOH and R2 and R3 each represents hydrogen or C1-C6 alkanoyl, wherein R4 is hydrogen or C1-C6 alkanoyl.

ABEQ US 4497803 A UPAB: 19930925

Inclusion cpds. of (A) lankacidin A, lankacidin C lankacidin C 8-ester, lankacidinol or a mixt. of these antibiotics and (B) beta- or gamma-**cyclodextrin** are new. The inclusion cpds. may be prepd. e.g. by dissolving an appropriate amt. of (B) in a solvent, adding a proportional amt. of (A), stirring and if necessary filtering. Opt. the obtd. soln. is freeze-dried.

USE/ADVANTAGE - Esp. for treating swine dysentery. Daily cpds. have high water solubility with high stability.

7/8

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=> s ceccato m?/au and py=1997 and (dextrin or cyclodex?)  
L4 9 CECCATO M?/AU AND PY=1997 AND (DEXTRIN OR CYCLODEX?)

=> d l4 bib abs 1-9

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:361560 CAPLUS  
DN 127:66392  
TI Molecular Dynamics of Novel  $\alpha$ - **Cyclodextrin** Adducts Studied  
by ~~13C-NMR~~ Relaxation  
AU Ceccato, Massimo; Lo Nostro, Pierandrea; Rossi, Claudio;  
Bonechi, Claudia; Donati, Alessandro; Baglioni, Piero  
CS ~~Department of Chemistry, University of Florence, Florence, 50121, Italy~~  
SO Journal of Physical Chemistry B (1997), 101(26), 5094-5099  
CODEN: JPCBPK; ISSN: 1089-5647  
PB American Chemical Society  
DT Journal  
LA English  
AB In the presence of poly(ethylene glycol) (PEG),  $\alpha$ -  
**cyclodextrin** forms a mol. adduct called a mol. necklace that  
belongs to the class of polyrotaxanes. The condensation of  $\alpha$ -  
**cyclodextrin** with epichlorohydrin results in the formation of the  
so-called mol. tube (MT), a rodlike rigid mol. with an empty hydrophobic  
cavity that can behave as a host for ions or small organic mols. A MT was  
obtained from PEG3350, considerably longer than the chain used in previous  
works. An NMR investigation is reported of the dynamic properties, via  
carbon spin-lattice relaxation techniques, of  $\alpha$ - **cyclodextrin**  
, the mol. necklace, and the mol. tube. The mol. tube is really formed by  
a linear thread of condensed  $\alpha$ - **cyclodextrin** mols. and the  
MT possesses a faster reorientational motion than all the other compds.  
UV spectroscopy shows that the mol. tube forms a host-guest system with  
iodine (I<sub>3</sub>-) in aqueous solution

Q01.  
J9

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:240315 CAPLUS  
DN 126:225730  
TI  $\alpha$ - **Cyclodextrin**/polyethylene glycol polyrotaxane: a study  
of the threading process  
AU **Ceccato, Massimo**; Lo Nostro, Pierandrea; Baglioni, Piero  
CS ~~Department of Chemistry, University of Florence, Florence, 50121, Italy~~  
SO Langmuir (1997), 13(9), 2436-2439  
CODEN: LANGD5; ISSN: 0743-7463  
PB American Chemical Society  
DT Journal  
LA English  
AB Aqueous solns. of  $\alpha$ - **cyclodextrin** ( $\alpha$ -CD) and polyethylene glycol (PEG) form interesting complexes, where several  $\alpha$ -CD units are penetrated by the linear polymeric PEG chain and produce a polyrotaxane. This supramol. structure is stabilized by strong interactions between the  $\alpha$ -CD hydrophobic internal cavity and the -CH<sub>2</sub>OCH<sub>2</sub>- moieties of PEG. When **cyclodextrins** have occupied the whole PEG chain, the polyrotaxanes aggregate and precipitate, forming a thick solid gel. Turbidity measurements at  $\lambda = 400$  nm were used to study the threading phenomenon. The temperature of the solution and the composition of the solvent affect the formation of polyrotaxanes in a significant way. A mol. model is proposed to explain the exptl. findings in terms of a multistep threading process. The Gibbs free energy of formation of polyrotaxanes was calculated according to the transition state theory.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:160368 CAPLUS  
TI Dynamic and kinetic properties of molecular necklaces and molecular tubes from  $\alpha$ - **cyclodextrin**/polyethylene glycol inclusion compounds in water solution.  
AU Nostro Lo, Pierandrea; **Ceccato, Massimo**; Rossi, Claudio; Baglioni, Piero  
CS ~~Department Chemistry, University Florence, Florence, 50121, Italy~~  
SO Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17 (1997), COLL-134 Publisher: American Chemical Society, Washington, D. C.  
CODEN: 64AOAA  
DT Conference; Meeting Abstract  
LA English  
AB We synthesized a new polyethylene glycol/ $\alpha$ - **cyclodextrin** (PEG/ $\alpha$ -CY) mol. adduct where  $\alpha$ -CY mols. are threaded around a single PEG (MW=3,350) chain. The condensation of  $\alpha$ -CY with epichlorohydrin results in the formation of the so-called "mol. tube", a rod-like rigid mol. with an empty hydrophobic cavity that can host ions or small organic mols. The kinetic of the threading process has been studied as a function of temperature and solvent composition. The dynamic properties of the  $\alpha$ -CY mol. necklace (MN) and mol. tube (MT) have been studied by <sup>13</sup>C-NMR spin lattice relaxation. The results show that MT is formed by a linear thread of crosslinked  $\alpha$ -CY moieties, and that MT possesses a faster orientational motion than  $\alpha$ -CY and MN.

L4 ANSWER 4 OF 9 BABS COPYRIGHT 2004 BEILSTEIN MDL on STN  
AN 6130331 BABS  
TI Molecular Dynamics of Novel  $\beta$ -**Cyclodextrin** Adducts Studied by

## 13C-NMR Relaxation

AU **Ceccato, Massimo**; Nostro, Pierandrea Lo; Rossi, Claudio;  
Bonechi, Claudia; Donati, Alessandro; Baglioni, Piero  
SO J.Phys.Chem.B (1997), 101(26), 5094-5099  
CODEN: JPCBFK

DT Journal

LA English

SL English

AN 6130331 BABS

AB In the presence of polyethylene glycol (PEG),  $\alpha$ -cyclodextrin forms a molecular adduct called "molecular necklace" that belongs to the class of polyrotaxanes. The condensation of  $\alpha$ -cyclodextrin with epichlorohydrin results in the formation of the so-called "molecular tube" (MT), a rodlike rigid molecule with an empty hydrophobic cavity that can behave as a host for ions or small organic molecules. MT has been obtained from PEG&3350%, considerably longer than the chain used in previous works. This paper reports an NMR investigation of the dynamic properties, via carbon spin-lattice relaxation technique, of  $\alpha$ -cyclodextrin, the molecular necklace, and the molecular tube. The results show that the molecular tube is really formed by a linear thread of condensed  $\alpha$ -cyclodextrin molecules and that MT possesses a faster reorientational motion than all the other compounds. UV spectroscopy shows that the molecular tube forms a host-guest system with iodine (I<sub>3</sub>(-)) in aqueous solution.

L4 ANSWER 5 OF 9 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED. on STN

AN 1997-0363548 PASCAL

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TIEN  $\alpha$ - Cyclodextrin/polyethylene glycol polyrotaxane : A study of the threading process

AU **CECCATO M.**; LO NOSTRO P.; BAGLIONI P.

CS Department of Chemistry, University of Florence, via Gino Capponi 9, 50121 Florence, Italy

SO Langmuir, (1997), 13(9), 2436-2439, 18 refs.

ISSN: 0743-7463 CODEN: LANGD5

DT Journal

BL Analytic

CY United States

LA English

AV INIST-20642, 354000065538960050

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AB Aqueous solutions of  $\alpha$ - cyclodextrin ( $\alpha$ -CD) and polyethylene glycol (PEG) form interesting complexes, where several  $\alpha$ -CD units are penetrated by the linear polymeric PEG chain and produce a so-called "polyrotaxane". This supramolecular structure is stabilized by strong interactions between the  $\alpha$ -CD hydrophobic internal cavity and the -CH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>- moieties of PEG. When cyclodextrins have occupied the whole PEG chain, the polyrotaxanes aggregate and precipitate, forming a thick solid gel. Turbidity measurements at  $\lambda = 400$  nm were used to study the threading phenomenon. The temperature of the solution and the composition of the solvent affect the formation of polyrotaxanes in a significant way. We propose a molecular model to explain the experimental findings in terms of multistep threading process. The Gibbs free energy related to the formation of polyrotaxanes is calculated according to the transition state theory.

L4 ANSWER 6 OF 9 COMPENDEX COPYRIGHT 2004 EEI on STN



AN 1997(40):863 COMPENDEX  
TI Molecular dynamics of novel alpha -**cyclodextrin** adducts studied  
by <sup>13</sup>C-NMR relaxation.  
AU **Ceccato, Massimo** (Univ of Florence, Firenze, Italy); Lo Nostro,  
Pierandrea; Rossi, Claudio; Bonechi, Claudia; Donati, Alessandro;  
Baglioni, Piero  
SO Journal of Physical Chemistry B v 101 n 26 Jun 26 1997.p 5094-5099  
CODEN: JPCBFK ISSN: 1089-5647  
PY 1997  
DT Journal  
TC Experimental  
LA English  
AN 1997(40):863 COMPENDEX  
AB In the presence of poly(ethylene glycol) (PEG), alpha -  
**cyclodextrin** forms a molecular adduct called 'molecular necklace'  
that belongs to the class of polyrotaxanes. The condensation of alpha -  
**cyclodextrin** with epichlorohydrin results in the formation of the  
so-called 'molecular tube' (MT), a rodlike rigid molecule with an empty  
hydrophobic cavity that can behave as a host for ions or small organic  
molecules. MT has been obtained from PEG3350, considerably longer than the  
chain used in previous works. This paper reports an NMR investigation of  
the dynamic properties, via carbon spin-lattice relaxation technique, of  
alpha -**cyclodextrin**, the molecular necklace, and the molecular  
tube. The results show that the molecular tube is really formed by a linear  
thread of condensed alpha -**cyclodextrin** molecules and that MT  
possesses a faster reorientational motion than all the other compounds. UV  
spectroscopy shows that the molecular tube forms a host-guest system with  
iodine (I<sub>3</sub> minus) in aqueous solution. (Author abstract) 33 Refs.

L4 ANSWER 7 OF 9 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on  
STN  
AN 97:504385 SCISEARCH  
GA The Genuine Article (R) Number: XG932  
TI Molecular dynamics of novel alpha-**cyclodextrin** adducts studied  
by C-13-NMR relaxation  
AU **Ceccato M**; LoNostro P; Rossi C; Bonechi C; Donati A; Baglioni P  
(Reprint)  
CS UNIV FLORENCE, DEPT CHEM, VIA GINO CAPPONI 9, I-50121 FLORENCE, ITALY  
(Reprint); UNIV FLORENCE, DEPT CHEM, I-50121 FLORENCE, ITALY; UNIV SIENA,  
DEPT CHEM, I-53100 SIENA, ITALY  
CYA ITALY  
SO JOURNAL OF PHYSICAL CHEMISTRY B, (26 JUN 1997) Vol. 101, No. 26,  
pp. 5094-5099.  
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.  
ISSN: 1089-5647.  
DT Article; Journal  
FS PHYS  
LA English  
REC Reference Count: 33  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*  
AB In the presence of poly(ethylene glycol) (PEG), alpha-  
**cyclodextrin** forms a molecular adduct called 'molecular  
necklace' that belongs to the class of polyrotaxanes. The condensation of  
alpha-**cyclodextrin** with epichlorohydrin results in the formation  
of the so-called 'molecular tube' (MT), a rodlike rigid molecule with an  
empty hydrophobic cavity that can behave as a host for ions or small  
organic molecules, MT has been obtained from PEG(3350), considerably  
longer than the chain used in previous works, This paper reports an NMR  
investigation of the dynamic properties, via carbon spin-lattice

relaxation technique, of alpha-cyclodextrin, the molecular necklace, and the molecular tube. The results show that the molecular tube is really formed by a linear thread of condensed alpha-cyclodextrin molecules and that MT possesses a faster reorientational motion than all the other compounds. UV spectroscopy shows that the molecular tube forms a host-guest system with iodine (I-3(-)) in aqueous solution.

L4 ANSWER 8 OF 9 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on STN

AN 97:354135 SCISEARCH

GA The Genuine Article (R) Number: WW988

TI alpha Cyclodextrin/polyethylene glycolpolyrotaxane: A study of the threading process

AU Ceccato M; LoNostro P; Baglioni P (Reprint)

CS UNIV FLORENCE, DEPT CHEM, VIA GINO CAPPONI 9, I-50121 FLORENCE, ITALY (Reprint); UNIV FLORENCE, DEPT CHEM, I-50121 FLORENCE, ITALY

CYA ITALY

SO LANGMUIR, (30 APR 1997) Vol. 13, No. 9, pp. 2436-2439. *Reprint*  
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.  
ISSN: 0743-7463.

DT Article; Journal

FS PHYS

LA English

REC Reference Count: 18

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Aqueous solutions of alpha-cyclodextrin (alpha-CD) and polyethylene glycol (PEG) form interesting complexes, where several alpha-CD units are penetrated by the linear polymeric PEG chain and produce a so-called "polyrotaxane". This supramolecular structure is stabilized by strong interactions between the alpha-CD hydrophobic internal cavity and the -CH<sub>2</sub>OCH<sub>2</sub>- moieties of PEG. When cyclodextrins have occupied the whole PEG chain, the polyrotaxanes aggregate and precipitate, forming a thick solid gel. Turbidity measurements at lambda = 400 nm were used to study the threading phenomenon. The temperature of the solution and the composition of the solvent affect the formation of polyrotaxanes in a significant way. We propose a molecular model to explain the experimental findings in terms of a multistep threading process. The Gibbs free energy related to the formation of polyrotaxanes is calculated according to the transition state theory.

L4 ANSWER 9 OF 9 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on STN

AN 97:280496 SCISEARCH

GA The Genuine Article (R) Number: WP185

TI Dynamic and kinetic properties of molecular necklaces and molecular tubes from alpha-cyclodextrin/polyethylene glycol inclusion compounds in water solution.

AU Nostro P L (Reprint); Ceccato M; Rossi C; Baglioni P

CS UNIV FLORENCE, DEPT CHEM, I-50121 FLORENCE, ITALY; UNIV SIENA, DEPT CHEM, I-53100 SIENA, ITALY

CYA ITALY

SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (13 APR 1997) *Reprint*  
) Vol. 213, Part 1, pp. 134-COLL.  
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.  
ISSN: 0065-7727.

DT Conference; Journal

LA English

Crane 09/339,818 (Ceccato 1997)

12/22/2004

REC Reference Count: 0

L3 QUE SEO ?/AU AND PY=1987 AND (CYCLODEX? OR DEXTRIN)

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=> s 13

L4 14 L3

=> d 14 bib abs 1-14

L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1988:55206 CAPLUS  
DN 108:55206  
TI Hydrolysis of phenyl esters in **cyclodextrin**-polymer systems  
AU **Seo, Toshihiro**; Kajihara, Taketoshi; Iijima, Toshiro  
CS Dep. Polym. Sci., Tokyo Inst. Technol., Tokyo, 152, Japan  
SO Makromolekulare Chemie (1987), 188(6), 1295-304  
CODEN: MACEAK; ISSN: 0025-116X  
DT Journal  
LA English  
AB The catalytic hydrolysis of Ph esters in systems containing **β-cyclodextrin** (β-CD) and polyelectrolytes was investigated. Poly(methacrylic acid) exhibits an inhibition effect on the hydrolysis; poly(sodium styrenesulfonate) (NaPSS) shows a pronounced acceleration effect on the hydrolysis; the larger the mol. weight and the lower the degree of substitution, the greater is the acceleration effect. On the other hand, sodium ethylbenzenesulfonate and sodium dodecylbenzenesulfonate inhibit the reaction. The acceleration of the reaction in presence of NaPSS is attributed to the concentration of β-CD and the substrate esters near to the chain of the macromol., through inclusion effects and hydrophobic interactions.

L4 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1987:554881 CAPLUS  
DN 107:154881  
TI The synthesis of poly(allylamine) containing covalently bound **cyclodextrin** and its catalytic effect in the hydrolysis of phenyl esters  
AU **Seo, Toshihiro**; Kajihara, Taketoshi; Iijima, Toshiro  
CS Dep. Polym. Sci., Tokyo Inst. Technol., Tokyo, 152, Japan  
SO Makromolekulare Chemie (1987), 188(9), 2071-82  
CODEN: MACEAK; ISSN: 0025-116X  
DT Journal  
LA English  
AB Poly(allylamine) containing covalently bound  $\beta$ - **cyclodextrin** (I) residues was synthesized. The inclusion ability of I was enhanced by bonding with the polymer. A pronounced catalytic acceleration of the hydrolysis of p- and m-nitrophenyl acetate by the modified polymer compared with that of the unmodified polymer indicated the cooperative effect of I and amino groups of the polymer chains.

L4 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1987:483776 CAPLUS  
DN 107:83776  
TI Improvement of dissolution and absorption characteristics of indomethacin by water-soluble  $\alpha$ - **cyclodextrin**-epichlorohydrin polymer  
AU Uekama, Kaneto; Udo, Kouichi; Irie, Tetsumi; Yoshida, Atsuya; Otagiri, Masaki; Seo, Hakaru; Tsuruoka, Michio  
CS Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, 862, Japan  
SO Acta Pharmaceutica Suecica (1987), 24(1), 27-36  
CODEN: APSXAS; ISSN: 0001-6675  
DT Journal  
LA English  
AB Complex formations of indomethacin (ID) with 3 water-soluble **cyclodextrin**-epichlorohydrin polymers ( $\alpha$ -CyD-EP,  $\beta$ -CyD-EP and  $\gamma$ -CyD-EP) in aqueous solution and in solid phase were studied by a solubility method, spectroscopy (UV, CD, IR), DTA and x-ray diffractometry. Through the binding to Cyd · EP polymers, the solubility and dissoln. rate of ID increased significantly in the order of  $\alpha$ -CyD-EP >  $\beta$ -CyD-EP >  $\gamma$ -CyD-EP, compared to those of parent CyDs. The rapidly dissolving form of ID- $\alpha$ -CyD-EP complex increased the serum levels of drug after oral administration to healthy men. Among the 3 CyD-EP polymers of  $\alpha$ -CyD-EP seemed to be particularly useful for improving the oral bioavailability of ID.

L4 ANSWER 4 OF 14 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED. on STN  
AN 1988-0115086 PASCAL  
TIEN Improvement of dissolution and absorption characteristics of indomethacin by water-soluble  $\alpha$ - **cyclodextrin**-epichlorohydrin polymer  
AU ~~UEKAMA K.~~; UDO K.; IRIE T.; YOSHIDA A.; OTAGIRI M.; **SEO H.**; TSURUOKA M.  
CS Kumamoto univ., fac. pharmaceutical sci., Kumamoto 862, Japan  
SO Acta pharmaceutica suecica, (1987), 24(1), 27-36, 12 refs.  
ISSN: 0001-6675 CODEN: APSXAS  
DT Journal  
BL Analytic  
CY Sweden  
LA English  
AV CNRS-11686

L4 ANSWER 5 OF 14 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED.  
on STN

AN 1988-0114172 PASCAL

TIEN The synthesis of poly(allylamine) containing covalently bound  
**cyclodextrin** and its catalytic effect in the hydrolysis of phenyl  
esters

AU **SEO T.**; KAJIHARA T.; IIJIMA T.

CS Tokyo inst. technology, dep. polymer sci., Meguro-ku Tokyo 152, Japan

SO Makromolekulare Chemie, (1987), 188(9), 2071-2082, 45 refs.

ISSN: 0025-116X CODEN: MACEAK

DT Journal

BL Analytic

CY Switzerland

LA English

AV CNRS-4111

ABFR L'acceleration catalytique de l'hydrolyse de l'acetate de p- et  
m-nitrophenyle par le polymere du titre compares a celle du  
poly(aminomethyl)-1 ethylene, indique un effet cooperatif de la  
**cyclodextrine** et des groupes amino sur les chaines polymeres

L4 ANSWER 6 OF 14 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED.  
on STN

AN 1987-0453180 PASCAL

TIEN Hydrolysis of phenyl esters in **cyclodextrin**-polymer systems

AU **SEO T.**; KAJIHARA T.; IIJIMA T.

CS Tokyo inst. technology, dep. polymer sci., Meguro-ku Tokyo 152, Japan

SO Makromolekulare Chemie, (1987), 188(6), 1295-1304, 45 refs.

ISSN: 0025-116X CODEN: MACEAK

DT Journal

BL Analytic

CY Switzerland

LA English

AV CNRS-4111

ABFR Hydrolyse dans les systemes  $\beta$ - **cyclodextrine**  
-polyelectrolyte (acide polymethacrylique [inhibition],  
polystyrenesulfonate de sodium [acceleration])

L4 ANSWER 7 OF 14 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on  
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AN 87:656535 SCISEARCH

GA The Genuine Article (R) Number: K9774

TI HYDROLYSIS OF PHENYL-ESTERS IN **CYCLODEXTRIN**-POLYMER SYSTEMS

AU **SEO T (Reprint)**; KAJIHARA T; IIJIMA T

CS TOKYO INST TECHNOL, DEPT POLYMER SCI, MEGURO KU, TOKYO 152, JAPAN  
(Reprint)

CYA JAPAN

SO MAKROMOLEKULARE CHEMIE-MACROMOLECULAR CHEMISTRY AND PHYSICS, (1987  
) Vol. 188, No. 6, pp. 1295-1304.

DT Article; Journal

FS PHYS

LA ENGLISH

REC Reference Count: 45

L4 ANSWER 8 OF 14 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on  
STN

AN 87:617134 SCISEARCH

GA The Genuine Article (R) Number: K6662

TI THE SYNTHESIS OF POLY(ALLYLAMINE) CONTAINING COVALENTLY BOUND  
**CYCLODEXTRIN** AND ITS CATALYTIC EFFECT IN THE HYDROLYSIS OF

## PHENYL-ESTERS

- AU **SEO T (Reprint)**; KAJIHARA T; IIJIMA T  
CS TOKYO INST TECHNOL, DEPT POLYMER SCI, MEGURO KU, TOKYO 152, JAPAN  
(Reprint)  
CYA JAPAN  
SO **MAKROMOLEKULARE CHEMIE-MACROMOLECULAR CHEMISTRY AND PHYSICS, (1987)**  
**Vol. 188, No. 9, pp. 2071-2082**  
DT Article; Journal  
FS PHYS  
LA ENGLISH  
REC Reference Count: 45
- L4 ANSWER 9 OF 14 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on  
STN  
AN 87:346419 SCISEARCH  
GA The Genuine Article (R) Number: H7528  
TI IMPROVEMENT OF DISSOLUTION AND ABSORPTION CHARACTERISTICS OF INDOMETHACIN  
BY WATER-SOLUBLE ALPHA-**CYCLODEXTRIN**-EPICHLOROHYDRIN POLYMER  
AU UEKAMA K (Reprint); UDO K; IRIE T; YOSHIDA A; OTAGIRI M; **SEO H**;  
TSURUOKA M  
CS KUMAMOTO UNIV, FAC PHARMACEUT SCI, 5-1 OE HONMACHI, KUMAMOTO 862, JAPAN  
(Reprint); MIYAZAKI MED COLL HOSP, DEPT PHARM, MIYAZAKI, MIYAZAKI 88916,  
JAPAN  
CYA JAPAN  
SO **ACTA PHARMACEUTICA SUECICA, (1987) Vol. 24, No. 1, pp. 27-36.**  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 12
- L4 ANSWER 10 OF 14 APOLLIT COPYRIGHT 2004 FIZ KA on STN  
AN 1988:1066 APOLLIT  
TI The synthesis of poly(allylamine) containing covalently bound  
**cyclodextrin** and its catalytic effect in the hydrolysis of phenyl  
esters  
Die Synthese von Polyallylamin, welches kovalent gebundenes  
**Cyclodextrin** enthaelt, und seine katalytische Wirkung bei der  
Hydrolyse von Phenylestern  
AU **Seo, T.; Kajihara, T.; Iijima, T.**  
SO **Macromol. Chem. Phys., Suppl. (1987) 188(9), p.2071-2082,**  
**12p,9f,2t,45l**  
CODEN: MCPSD8 ISSN: 0252-1997  
DT Journal  
LA English  
AB Ein Polyallylamin mit kovalent gebundenen beta-**Cyclodextrin**  
-Seitengruppen wurde synthetisiert und IR- und NMR-spektroskopisch  
charakterisiert. Der resultierende polymere Katalysator zeigt eine hohe  
katalytische Aktivitaet bei der Hydrolyse von Phenylestern, die auf eine  
kooperative Wirkung von **Cyclodextrin**- und Aminogruppen in den  
Seitengruppen hindeutet. Die Untersuchungen stellen einen Beitrag zur  
Klaerung des molekularen Designs von synthetischen Enzymen dar.
- L4 ANSWER 11 OF 14 APOLLIT COPYRIGHT 2004 FIZ KA on STN  
AN 1988:924 APOLLIT  
TI Hydrolysis of phenyl esters in **cyclodextrin**-polymer systems  
Hydrolyse von Phenylestern in **Cyclodextrin**-Polymer-Systemen  
AU **Seo, T.; Kajihara, T.; Iijima, T.**  
SO **Macromol. Chem. Phys., Suppl. (1987) 188(6), p.1295-1304,**  
**10p,9f,1t,45l**

CODEN: MCPSD8 ISSN: 0252-1997

DT Journal

LA English

AB Die katalytische Hydrolyse von Phenylestern durch beta-**Cyclodextrin** in Gegenwart von Polyelektrolyten wurde untersucht. Polymethacrylsaeure zeigte eine inhibierende Wirkung auf die Hydrolyse, Natriumpolystyrolsulfonat bewirkte dagegen eine deutliche Beschleunigung der Hydrolyse. Je hoeher das Molekulargewicht und je niedriger der Substitutionsgrad war, desto hoeher war die Beschleunigung. Der Wirkungsmechanismus wird diskutiert.

L4 ANSWER 12 OF 14 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
STN

AN 1987:465971 BIOSIS

DN PREV198784111411; BA84:111411

TI IMPROVEMENT OF DISSOLUTION AND ABSORPTION CHARACTERISTICS OF INDOMETHACIN  
BY WATER-SOLUBLE ALPHA **CYCLODEXTRIN**-EPICHLOROHYDRIN POLYMER.

AU UEKAMA K [Reprint author]; UDO K; IRIE T; YOSHIDA A; OTAGIRI M; **SEO**  
**H**; TSURUOKA M

CS FAC PHARMACEUTICAL SCI, KUMAMOTO UNIV, 5-1, OE-HONMACHI, KUMAMOTO 862,  
**JAPAN**

SO Acta Pharmaceutica Suecica, (1987) Vol. 24, No. 1, pp. 27-36.

CODEN: APSXAS. ISSN: 0001-6675.

DT Article

FS BA

LA ENGLISH

ED Entered STN: 7 Nov 1987

Last Updated on STN: 7 Nov 1987

AB Complex formations of indomethacin (ID) with three water-soluble **cyclodextrin**-epichlorohydrin polymers ( $\alpha$ -CyD · EP,  $\beta$ -CyD · EP and  $\gamma$ -CyD · EP) in aqueous solution and in solid phase were studied by a solubility method, spectroscopy (UV, CD, IR), DTA and X-ray diffractometry. Through the binding to CyD · EP polymers, the solubility and dissolution rate of ID increased significantly in the order of  $\alpha$ -CyD · EP >  $\beta$ -CyD · EP >  $\gamma$ -CyD · EP, compared to those of parent CyDs. The rapidly dissolving form of ID- $\alpha$ -CyD · EP complex was found to increase the serum levels of drug after oral administration to healthy men. Among the three CyD · EP polymers,  $\alpha$ -CyD · EP seemed to be particularly useful for improving the oral bioavailability of ID.

L4 ANSWER 13 OF 14 DRUGU COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1987-36026 DRUGU P G

TI Improvement and Dissolution and Absorption Characteristics of  
Indomethacin by Water-soluble alpha-**Cyclodextrin**  
Epichlorohydrin Polymer.

AU Uekama K; Udo K; Irie T; Oshida A; Otagiri M; **Seo H**

LO Kumamoto, Miyazaki, Japan

SO Acta Pharm.Suec. (24, No. 1, 27-36, 1987) 8 Fig. 1 Tab. 12 Ref.

CODEN: APSXAS

AV Faculty of Pharmaceutical Sciences, Kumamoto University, 5-1,  
Oe-honmachi, Kumamoto 862, Japan.

LA English

DT Journal

FA AB; LA; CT; MPC

FS Literature

AN 1987-36026 DRUGU P G

AB The in vitro dissolution and in vivo absorption characteristics of



indometacin (IN, Sumitomo) in complexes with alpha-cyclodextrin (AC), beta-cyclodextrin (BC), gamma-cyclodextrin (GC) and their respective cyclodextrin-epichlorohydrin (EP) polymers (AP.EP, BC.EP, GC.EP) were studied. In vitro, the cyclodextrin-EP polymers were more potent solubilizers of IN than the parent cyclodextrins; physical characterization suggested that the interactions between IN and the cyclodextrin-EP polymers in solution and in the solid phase, were less strong than those between IN and the cyclodextrin alone. AC.EP was the most efficient solubilizer of IN and caused supersaturation of IN to occur; in 4 subjects after p.o. administration of an IN-AC.EP capsule, the bioavailability of IN was greater than after IN or IN-AC capsules. With AP.EP, BC.EP and GC.EP complexes with IN, there was a first-order dependency of the solubility of IN on the polymer concentration. The solubility of IN from the complexes decreased in the order: AC.EP, BC.EP, BC, AC, GC.EP, GC. The CD spectra of the AC.EP complex was different from those of the other complexes, the spectra of BC.EP and GC.EP differed from those of BC and GC. The X-ray diffraction patterns of physical mixtures of IN with AC and AC.EP were a superposition of each component; in the patterns of the complexes, the component peaks disappeared to give a less crystalline form. Complexes of IN with EC.EP with differing weight ratios (1:1, 1:3, 1:5, 1:7, 1:10) all dissolved rapidly compared to IN alone, and was proportional to the amount of AC.EP up to a 1:5 ratio. At a 1:5 ratio, the initial dissolution rate of IN from complexes decreased in the order AC.EP, BC.EP, GC.EP, BC, AC, GC. With the cyclodextrin:EP complexes, the concentration of IN following dissolution highly exceeded its normal solubility. The net permeation of IN through a cellophane membrane increased as the dissolution rate from the AC.EP complex in the donor cell increased. The peak serum IN, following administration of IN (25 mg) in a complex with AC.EP to 4 men (23-24 yr), was 0.67 +/- 0.04 ug/ml, significantly higher (by 1.4 times) than after IN alone; the AUC up to 12 hr was 1.2 times greater than with IN alone. With the AC complex, no significant improvement of the AUC was seen. There was no significant difference in the Tmax after IN alone or in complexes. (KEW)

ABEX

L4 ANSWER 14 OF 14 MEDLINE on STN  
AN 87295284 MEDLINE  
DN PubMed ID: 3618246  
TI Improvement of dissolution and absorption characteristics of indomethacin by water-soluble alpha-cyclodextrin-epichlorohydrin polymer.  
AU Uekama K; Udo K; Irie T; Yoshida A; Otagiri M; Seo H; Tsuruoka M  
SO Acta pharmaceutica Suecica, (1987) 24 (1) 27-36.  
Journal code: 0000216. ISSN: 0001-6675.  
CY Sweden  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 198709  
ED Entered STN: 19900305  
Last Updated on STN: 19900305  
Entered Medline: 19870903

